

### III. Gather Data

#### A. Ozone Eaters

- Click on the "Common Questions" site.

1. How is ozone distributed in the atmosphere?

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2. What is the "Ozone Hole" ?

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3. Besides CFCs, what other molecules destroy ozone?

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- Click "Back" to return to the Ozone "Gather Data.1" web page.

### **B. Proof of Damage**



- Click on the "Evidence" site.
- Look at the figure and answer the following questions:



1. As the concentration of chlorine rises, what happens to the concentration of ozone?

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- Click "Back" to return to the Ozone "Gather Data.1" page.

### **C. Natural vs. Artificial**



- Click on the "Chlorine Sources" site.



1. Since nature produces chlorine all the time, why do only artificially produced chlorine molecules cause trouble?

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2. What percent of the chlorine in the atmosphere can be attributed to nature? \_\_\_\_\_

- Click "Back" to return to the Ozone "Gather Data.1" web page.
- Click "Forward" at the bottom of the page.



#### D. Total Ozone Loss

- Click on the "October Ozone Hole" site.
- Scroll down to the graph.



1. Compute the percentage of ozone in Antarctica in 1993 compared to the amount of ozone we had in October in 1957.
  - a. Estimate the total ozone in 1957 and record it below.  
\_\_\_\_\_ Dobson units.
  - b. Estimate the total ozone in 1993 and record it below.  
\_\_\_\_\_ Dobson units.
  - c. Divide the 1993 value by the 1957 value.
  - d. Move the decimal two places to the right to get the percentage of ozone that we have now.



- Click "Back" to return to the Ozone "Gather Data.2" web page.

### E. Sunburn Effects



- Click on the "Ultraviolet Radiation" site.



1. If the concentration of ozone decreases 30%, how much additional UV radiation will reach the surface of the earth? \_\_\_\_\_



- Click "Back" to return to the Ozone "Gather Data.2" web page.

### F. Future Outlook



- Click on the "Ozone Treaty" site.



1. What is expected to happen to the ozone layer during your lifetime?  
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- Click "Back" to return to the Ozone "Gather Data.2" web page.

### G. Unusual Suspect



- Click on the "Rural Ozone" site.



1. What problems are associated with ozone at ground level?

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2. How are we producing ozone at ground level?

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3. How can we decrease the ozone concentrations at ground level?

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4. What changes in our lives can we make to reduce ozone concentrations at ground level?

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- Click "Back" to return to the Ozone "Gather Data.2" web page
- Click "Return" at the bottom of the page, or choose "Ozone" from your Bookmarks or Favorites.
- Click on "Application."